



217/782-9882

Refer to: 1978030003 -- Will County  
Lemont/Land and Lakes  
Permit No. 1976-17-OP  
Supplemental Permit No. 1983-142-SP

January 7, 1985

Land and Lakes Company  
P.O. Box 778  
Park Ridge, Illinois 60068

Gentlemen:

Pursuant to item ten of Attachment A to Permit No. 1976-17-OP dated December 13, 1982, your permit is hereby modified to reflect the following changes to the water monitoring program.

For the results due April 15, 1985 and for all future water monitoring reports, samples shall be analyzed for the parameters specified below for each monitoring point:

|                     |  |
|---------------------|--|
| Alkalinity          | Calcium                                |
| Boron               | Iron                                   |
| Chloride            | Magnesium                              |
| pH (field measured) | Zinc                                   |
| R.O.E.              | Temperature (field measured)           |
| SC (field measured) | Total depth of well below land surface |
| Sulfate             | Elevation of groundwater surface       |
| TOC                 | Depth to water from land surface       |
| TOX                 |  |

For the monitoring reports for G102 due July 15, 1985 and October 15, 1985, sample and analyze for the background parameters and those parameters and measurements from the list above not in the background list.

EPA Region 5 Records Ctr.



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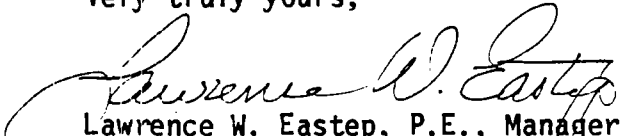


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All certifications, logs, or reports which are required to be submitted to the Agency by the permittee should be mailed to the following address:

Illinois Environmental Protection Agency  
Compliance Monitoring Section  
Division of Land Pollution Control -- #24  
2200 Churchill Road  
Springfield, Illinois 62706

Very truly yours,

  
Lawrence W. Eastep, P.E., Manager  
Permit Section  
Division of Land Pollution Control

LWE:SAS:bjh/0009E/20

Enclosure

cc: Compliance Monitoring Section  
Division File  
Northern Region



Refer to: Site No. 19780303 -- Will County  
Lemont/Land and Lakes Company  
Permit No. 1983-142-SP

October 7, 1983 (Revised)

ATTACHMENT A  
WATER MONITORING PROGRAM

1. Monitoring points shall be installed at the following locations and shall be referenced as the Agency designation:

| <u>Applicant Designation</u> | <u>Agency Designation</u> |
|------------------------------|---------------------------|
| B-1B                         | G101                      |
| B-2B                         | G102                      |
| New Well*                    | G13D                      |
| B-8R (P-3)                   | G18S                      |
| B-8AR (P-4)                  | G18D                      |
| B-9                          | G19S                      |
| B-9A                         | G19D                      |

\*See Special Condition No. 1 of this permit (1983-142-SP).

Upon installation, the monitoring well shall be developed. Include details of well development when submitting well construction information.

2. Within sixty days of installation of any monitoring point, boring logs and as-built diagrams shall be submitted to the Agency. As built diagrams, for each monitoring point installed, shall include the type and inner diameter of casing material used, type and length of screen packing material used, type and length of seals used, type of backfill used, finishing details, groundwater levels, elevation of the top of casing, ground surface elevation, bottom elevation, interval screened, and depth. All elevations or levels are to be measured to the nearest 0.01 foot, and reported rounded to the nearest 0.1 foot.
3. All borings not utilized as monitoring points shall be backfilled with concrete or a bentonite and soil mix. Details of bore hole plugging are to be submitted to the Agency with as-built diagrams.
4. The annular space (the space between the bore hole and the well casing) for a distance of three feet above the top of the screen must be sealed with a suitable material (e.g., expanding cement grout or bentonite) to prevent contamination of samples and the groundwater. Above this, uncontaminated boring cuttings may be backfilled to within five feet of the surface. An expanding concrete plug shall be placed from five feet to a point above the ground surface and be sloped away from the well casing so that surface water will be diverted away from the well casing and bore hole.

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5. The portion of the well casing, extending above the ground surface, must be protected to minimize damage or tampering.
6. Wells shall be easily visible and identified with Agency monitoring point designation.
7. All monitoring points shall be maintained such that a sample may be obtained.
8. For the points described in Item 1 of this attachment, the concentration or value of the following parameters in the ground water samples shall be determined and reported quarterly during the first year:

|   |                                 |
|---|---------------------------------|
| Alkalinity, as CaCO <sub>3</sub> (unfiltered) | Nickel (Ni)                     |
| Ammonium (N)                                  | Nitrate-Nitrite (N)             |
| Arsenic (As)                                  | pH                              |
| Barium (Ba)                                   | Phenols                         |
| Boron (B)                                     | Phosphate (PO <sub>4</sub> )    |
| Cadmium (Cd)                                  | Potassium (K)                   |
| Calcium (Ca)                                  | Selenium (Se)                   |
| Chloride (Cl)                                 | Silicate (SiO <sub>4</sub> )    |
| Chromium (Cr) (total)                         | Silver (Ag)                     |
| Cyanide (CN)                                  | Sodium (Na)                     |
| Fluoride (F)                                  | Specific Conductance (SC)       |
| Iron (Fe)                                     | Sulfate (SO <sub>4</sub> )      |
| Lead (Pb)                                     | Zinc (Zn)                       |
| Magnesium (Mg)                                | TOC (Volatile and non-volatile) |
| Manganese (Mn)                                | TOX                             |
| Mercury (Hg)                                  | ROE                             |

9. The following items shall be determined each time a sample is obtained, and shall be reported with the analysis:
  - a. Elevation of the groundwater surface at each monitoring well. This determination is to be made prior to any water being withdrawn from the monitor well. These elevations shall be measured to the nearest 0.01 foot, and reported rounded to the nearest 0.1 foot.
  - b. The temperature of the water sample.
  - c. The height of the stick-up, as measured from ground level, and the depth to the bottom of the well, as measured from the top of the stick-up.

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10. After the first year, each monitoring point must be sampled quarterly and the samples analyzed for parameters as specified by the Agency.
11. The schedule for sample collection and submission of quarterly water monitoring results is as follows:

| <u>Results Due to<br/>the Agency by:</u> | <u>Samples to be Collected<br/>During the Months of:</u> |
|--|--|
| 15th of January                          | October -- November                                      |
| 15th of April                            | January -- February                                      |
| 15th of July                             | April -- May   |
| 15th of October                          | July -- August   |

12. This Agency reserves the right to require installation of additional monitoring devices, to alter the selection of parameters to be analyzed and to alter monitoring frequencies at any time as may be necessary to fulfill the intent of the Illinois Environmental Protection Act.
13. All certifications, logs, or reports which are required to be submitted to the Agency by the permittee should be mailed to the following address:  
  
Illinois Environmental Protection Agency  
Compliance Monitoring Section  
Division of Land Pollution Control -- #24  
2200 Churchill Road  
Springfield, Illinois 62706
14. This revised water monitoring shall replace that attached to operating permit 1976-17 dated December 13, 1982.

RWS:sd/8147c/24-26

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